

Serial No.: 09/493,983

Version with Markings to Show Changes Made

In the Claims

Claims 8, 9, 12 and 15 have been amended as follows:

8. (Twice Amended) The motor according to claim 1, further comprising a case for accommodating the bearing, the rotary member, and the fixed surface, wherein the case has [a slit] an outer surface with one or more slits disposed thereon for cooling the bearing [, the rotary member,] and the fixed surface.

9. (Twice Amended) A motor comprising:

a rotary shaft; and

a bearing for radially supporting the rotary shaft, wherein the bearing includes:

a cylindrical rotary member connected to the rotary shaft;

a cylindrical fixed surface surrounding the rotary member, wherein the fixed surface is spaced from the rotary member by a predetermined distance, and wherein the rotary member is made of a material having a coefficient of thermal expansion that is $5 \times 10^{-6}/^{\circ}\text{C}$ or less, and which is smaller than the coefficient of thermal expansion of the material of the fixed surface; and

armature coils arranged about a peripheral surface of the fixed surface to rotate the rotary shaft.

12. (Twice Amended) The motor according to claim 9, further comprising a case for accommodating the bearing, the rotary member, and the fixed surface, and the fixed surface,

wherein the case has [a slit] an outer surface with one or more slits disposed thereon for cooling the bearing [, the rotary member,] and the fixed surface.

15. (Twice Amended) A turbo-molecular pump comprising:

a housing;

a stator vane attached to the housing;

a rotor vane rotated relative to the stator vane; and

a motor for driving the rotor vane, wherein the motor includes:

a rotary shaft; and

a bearing for radially supporting the rotary shaft, wherein the bearing includes:

a cylindrical rotary member connected to the rotary shaft;

a cylindrical fixed surface surrounding the rotary member, wherein the fixed surface is spaced from the rotary member by a predetermined distance, and wherein the rotary member is made of a material having a coefficient of thermal expansion that is $5 \times 10^{-6}/^{\circ}\text{C}$ or less, and which is smaller than the coefficient of thermal expansion of the material of the fixed surface; and

armature coils arranged about a peripheral surface of the fixed surface to rotate the rotary shaft.